

ABSTRACT OF THE DISCLOSURE

A coupler is disclosed that includes first and second mutually coupled spirals disposed on opposite sides of a dielectric substrate. The substrate may be formed of one or more layers and the coils may have a number of turns appropriate for a given application. Conductors forming the spirals may be opposite each other on the substrate and each spiral may include one or more portions on each side of the substrate. Each conductor of the coupler may include an intermediate portion having a width that is more than the width of end portions. An extension may extend from each respective intermediate portion, with the two extensions extending in non-overlapping relationship.